

43. (New) A method of treating a neoplastic condition in a human patient comprising administering to said patient an antineoplastic amount of the retinoblastoma polypeptide of any one of claims 5, 32, 33, and 39.

44. (New) The method of claim 43, wherein said neoplastic condition is a tumor.

45. (New) The method of claim 43, wherein said neoplastic condition is osteosarcoma.

46. (New) The method of claim 43, wherein said neoplastic condition is soft-tissue sarcoma.

47. (New) The method of claim 43, wherein said neoplastic condition is retinoblastoma.

48. (New) A method of treating pathologically proliferating cells lacking endogenous functional retinoblastoma protein, the method comprising contacting the proliferating cells with an effective amount of a retinoblastoma polypeptide comprising a C-terminal retinoblastoma polypeptide, the polypeptide having a molecular weight of about 56 kD, whereby cellular proliferation is inhibited.

REMARKS

The corrections to the specification sought herein are supported in the record as follows:

The description of Figure 6 was amended for clarification at the request of the examiner in a related divisional application, Serial No. 07/958,290. The amendment to the description of Figure 6 does not constitute new matter.

The amendment at page 3 of the specification is supported at least in part in originally-numbered claim 6 of parent application U.S. Serial No. 895,163 (the "'163 application"), which was incorporated by reference in its entirety into the present application. See, specification at page 1, lines 2-5. The specification has been amended by inserting into it the language from page 2, paragraph 1 and from claims 5 and 6 of the '163 application. MPEP §§ 608.01(p) and

2163.07(b)(Rev. 2, July 1996); see, MPEP 2163.03(a) citing, In re Koller, 613 F.2d 819, 823-24, 204 USPQ 702 (CCPA 1980) ("Original claims constitute their own description.").

Terminal Disclaimer

Applicants respectfully request that, to the extent that the Examiner considers one or more of the pending claims subject to a provisional obviousness-type double patenting rejection over U.S. Patent No. 5,853,988 (which issued on December 29, 1998 to Dryja et al.), that such rejection be held in abeyance until at least one claim of the present application is deemed allowable. Applicants will file a terminal disclaimer pursuant to 37 CFR 1.321, disclaiming any portion of the patent term of the present application that, once issued, may extend beyond the term of patent 5,853,988 patent, if such a filing is deemed to be necessary and appropriate.

Biological Deposits

The biological deposits listed below have been deposited with the American Type Culture Collection (ATCC):

1. An isolated cDNA clone of the set of cDNA clones disclosed in the specification (page 9, lines 2-8) was deposited with the ATCC on December 15, 1995 and assigned ATCC accession number 97383 (Exhibit 1). Deposit No. 97383 is in essentially the same form it was in prior to the August 11, 1986 effective filing date of the application.

2. The probe p7H30.7R was deposited with the ATCC on April 25, 1996 and assigned ATCC accession number 97522 (Exhibit 2). The p7H30.7R probe is described at page 4, lines 15-25, and at page 9, lines 2-7. ATCC deposit no. 97522 is in essentially the same form it was in prior to the August 11, 1986 effective filing date of the application.

3. The following 24 plasmid clones were deposited with the American Type Culture Collection (ATCC) on March 12, 1997. Each plasmid includes one or more of exons 1-27: Exon 1 is assigned ATCC Nos. 97927 and 97928; Exon 2 is assigned ATCC No. 97929; Exon 3

is assigned ATCC No. 97932; Exon 4 is assigned ATCC No. 97930; Exon 5 is assigned ATCC Nos. 97935 and 97934; Exon 6 is assigned ATCC Nos. 97933 and 97947; Exon 7 is assigned ATCC No. 97946; Exon 8 is assigned ATCC No. 97945; Exon 9 is assigned ATCC No. 97936; Exons 10 and 11 are assigned ATCC No. 97937; Exon 12 is assigned ATCC No. 97938; Exons 13, 14, 15, 16, and 17 are assigned ATCC No. 97950; Exon 18 is assigned ATCC No. 97949; Exon 19 is assigned ATCC No. 97948; Exon 20 is assigned ATCC No. 97941; Exon 21 is assigned ATCC No. 97940; Exons 21, 22, and 23 are assigned ATCC No. 97939; Exon 24 is assigned ATCC No. 97944; Exons 25, 26, and 27 are assigned ATCC No. 97943; Exon 27 is assigned ATCC No. 97942.

Each of the biological plasmids placed on deposit as ATCC Nos. 97927 - 97942, inclusive, is in essentially the same form it was in when first isolated. Receipt of deposits 97929-97942 as acknowledged on six pages of receipts. A copy of each of the six ATCC receipts acknowledging the deposit of ATCC Nos. 97927-97942 is enclosed herewith as Exhibit 3. No new matter is added to the application either by this amendment or by deposit of these plasmids. By these deposits, Applicants ensure that these biological materials will be available to the public when a patent issues from the present application. *In re Lundak*, 773 F.2d 1216, 227 USPQ 90 (Fed. Cir. 1985); MPEP 2164.06(b).

Disclosure under 37 CFR §1.56

The following information is submitted in keeping with Applicants' duty of disclosure under 37 CFR §1.56. By submitting this information, Applicants do not imply that the information is material to patentability. MPEP 2001, 2001.05.

(1) An interference proceeding (No. 103,426) was declared in a letter from the Board of Appeals and Interferences mailed January 31, 1995, between application 07/958,290,

filed October 8, 1992 (Dryja et al., senior party), and application 07/951,947, filed September 28, 1992 (Lee et al., junior party). The '290 application, now U.S. Patent No. 5,853,988, is a co-pending divisional of the parent application Serial No. 07/951,342, which similarly has an effective filing date of August 11, 1986. The interference proceeding was terminated by the Board in a JUDGMENT mailed on January 31, 1996, awarding priority to senior party Dryja over the subject matter encompassed by sole count 1:

Purified nucleic acid comprising a human retinoblastoma gene, or a fragment thereof comprising 15 or more bases, said nucleic acid being less than 100 kb in size.

(2) During the interference proceeding, Applicants became aware that the cDNA clone p2AR0.9 (ATTC acc. no. 40,242) contains a single base deletion at nucleotide 184.

Without nucleotide 184, a CAG glutamine codon becomes a TAG stop codon.

(3) During the interference proceeding, Applicants became aware that the cDNA sequence of Fig. 5 is not equivalent to what is now considered the consensus sequence of the retinoblastoma gene. Nonetheless, (a) the nucleotide sequence of FIG. 5 includes the a full-length Rb coding sequence (*see*, nucleotides 4-2784); and (b) exons 1-27 of Figure 6 together provide a full-length Rb coding sequence.


CONCLUSION

In view of the foregoing, it is submitted that the application is in condition for allowance and such action is respectfully requested. Enclosed herewith are Exhibits 1-3 (ATCC Receipts).

Please charge any fees or apply any credits to our Deposit Account No. 50-0311, Ref. No.
19100-021.

Respectfully submitted,

Date: January 12, 2000


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